



# UNITED STATES PATENT AND TRADEMARK OFFICE

*col*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,250	03/26/2004	Youping Zhang	NMTC-0756DIV1	8316
22835	7590	04/22/2005	EXAMINER	
A. RICHARD PARK, REG. NO. 41241 PARK, VAUGHAN & FLEMING LLP 2820 FIFTH STREET DAVIS, CA 95616			BOWERS, BRANDON	
			ART UNIT	PAPER NUMBER
			2825	

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/810,250	<b>Applicant(s)</b> ZHANG, YOUPIING	
	<b>Examiner</b> Brandon W. Bowers	<b>Art Unit</b> 2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 31-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 31 is objected to because of the following informalities: the preamble recites a method for controlling rippling, but the claims do not state how these method steps control rippling; in other words, the claims do not particularly point out how "rippling" relates to the method steps. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 31-33, 35-40, 42-47, and 49-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Pierrat et al. US Patent No 6,665,856.

In reference to claim 31, Pierrat teaches a method comprising selecting a first evaluation point for a segment that is part of an edge in a layout of an IC and computing a deviation from a target location for the segment at the first evaluation point (column 14, lines 27-57), selecting a second evaluation point and computing a second deviation from for the segment at the second evaluation point, and adjusting the bias for the given

segment based upon the multiple deviations at the multiple points (column 16, lines 20-61).

In reference to claims 32, Pierrat teaches wherein the second point is supplemental (column 16, lines 20-61).

In reference to claims 33, Pierrat teaches wherein the points are located in the segment (Figure 3a).

In reference to claim 35, Pierrat teaches adjusting biases for each segment in the IC layout (figure 4a).

In reference to claim 36, Pierrat teaches multiple supplemental evaluation points (Figure 3a).

In reference to claim 37, Pierrat teaches wherein computing the deviations is model based (column 1, lines 57-62).

In reference to claims 38-40, 42-47, and 49-54 drawn to computer instructions, apparatus, masks, or ICs created by or using the methods rejected above containing the same limitations as rejected above, the same rejection applies.

Claims 31, 34, 38, 41, 45, 48, and 52-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Lippincott et al. US Patent No 6,574,784.

In reference to claim 31, Lippincott teaches a method comprising selecting a first evaluation point for a segment that is part of an edge in a layout of an IC and computing a deviation from a target location for the segment at the first evaluation point, selecting a second evaluation point and computing a second deviation from for the segment at

Art Unit: 2825

the second evaluation point, and adjusting the bias for the given segment based upon the multiple deviations at the multiple points (Figures 12-15, Column 6, lines 20-64).

In reference to claim 34, Pierrat teaches wherein the second point is in an adjacent segment (Figures 12-15, Column 6, lines 20-64).

In reference to claims 38, 41, 45, 48, and 52-54 drawn to computer instructions, apparatus, masks, or ICs created by or using the methods rejected above containing the same limitations as rejected above, the same rejection applies.

### ***Conclusion***

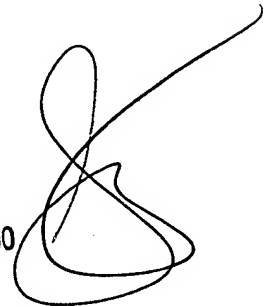
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon W. Bowers whose telephone number is (571)272-1888. The examiner can normally be reached on 8:30 am until 5:00 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on (571)272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BWB

A. M. Thompson  
Primary Examiner  
Technology Center 2800

A handwritten signature in black ink, consisting of a large, stylized loop followed by a horizontal stroke and a small upward flick.